



Authoritative Source for Location

Lora Muchmore
Director
ODUSD(I&E)

Business Enterprise Integration Directorate

October 19, 2007



Location Defined

Acquisition, Technology and Logistics

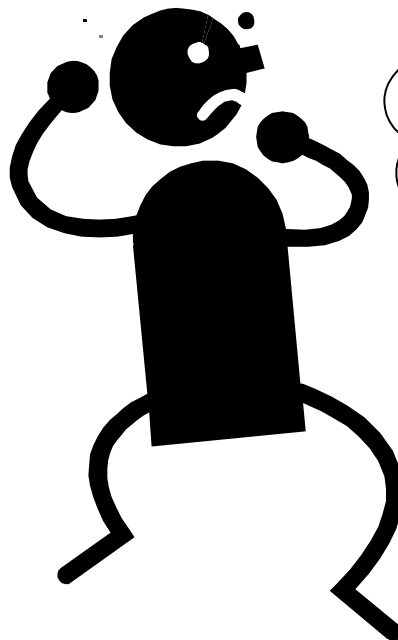
Where am **I**?



Where's my **stuff**?

What's **around me**?

Absolute
e versus
Relative





Challenges Today

Acquisition, Technology and Logistics

- Association of people and equipment to location
- Many different sources of location data/standards
 - GEOLOCs
 - DoDAACs
 - Installation Codes
 - DMDC location codes
 - UICS
- Data integration
 - Accuracy problems
 - Costly
 - Timely



Policy Drivers for Change

Acquisition, Technology and Logistics

- **DoDD 8320.2, Data Sharing in a Net-Centric Environment**, December 2, 2004
 - “Data interoperability shall be supported by making data assets understandable and by enabling business and mission processes to be reused where possible.”*
- **USD AT&L, Policy for Unique Identification (UID) of Real Property Sites and Assets**, May 11, 2005
 - “Real Property UID will enable real property data linkage across business mission areas to achieve the AT&L vision of linking real property, personal property, and people – any place, any time, any where.”*
- **DoDD 8320.03, Unique Identification (UID) Standards for a Net-Centric Department of Defense**, March 23, 2007
 - “Develop and promulgate policy guidance for defining, implementing, and maintaining location UID standards...”*

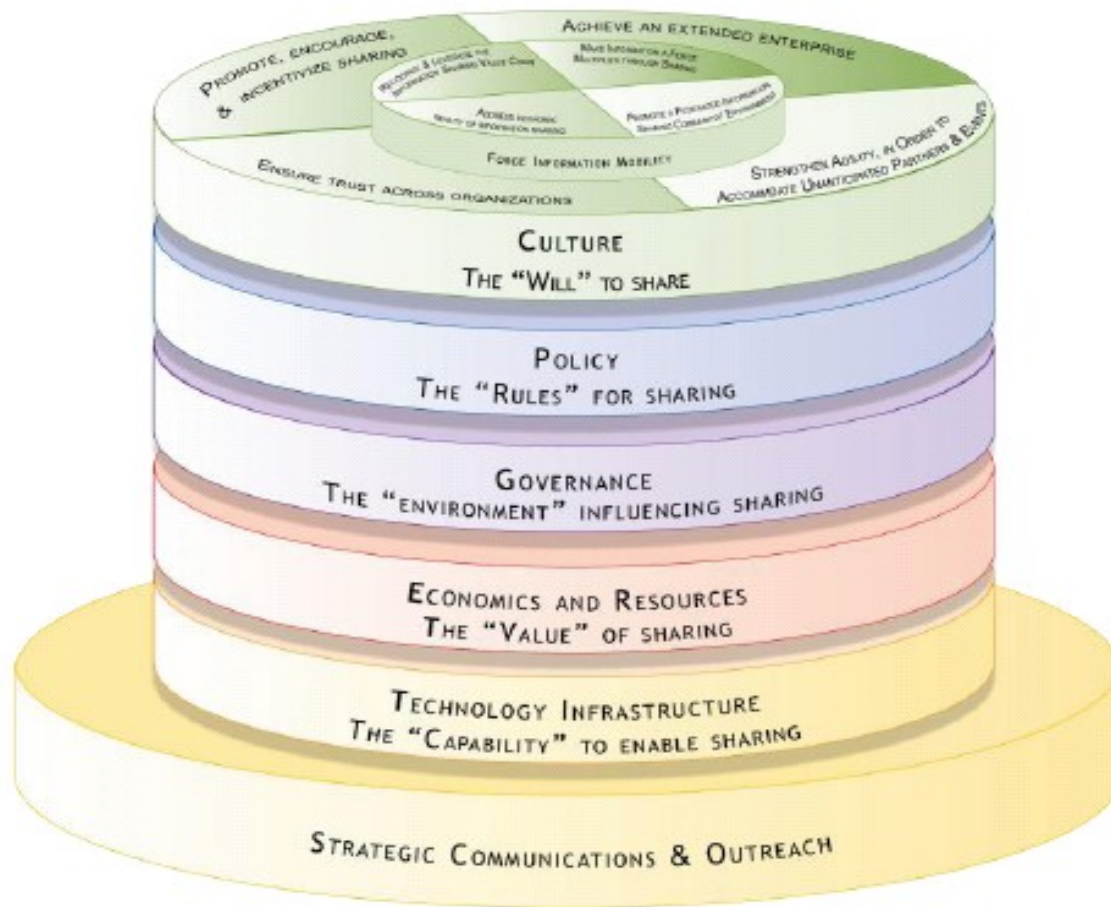


Policy Drivers

Acquisition, Technology and Logistics

- DoD CIO, *DoD Information Sharing Strategy*, May 4, 2007

DELIVER THE POWER OF INFORMATION TO ENSURE MISSION SUCCESS
THROUGH AN AGILE ENTERPRISE WITH FREEDOM OF MANEUVERABILITY ACROSS THE INFORMATION ENVIRONMENT





Policy Drivers

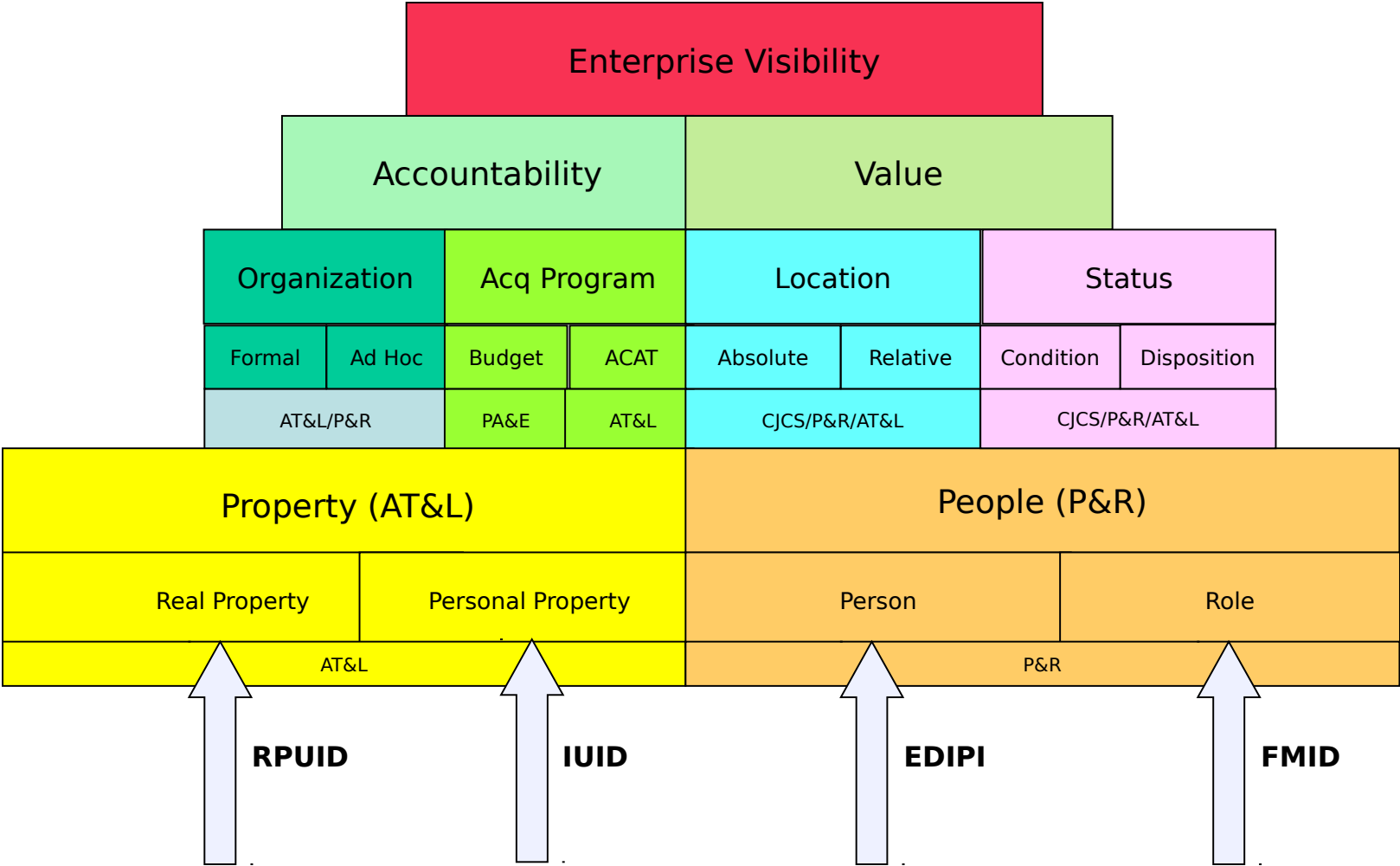
Acquisition, Technology and Logistics

- Enterprise Transition Plan, March 2007
 - **Four key objectives of the Department's business transformation efforts are to:**
 - Provide support for the joint warfighting capability
 - Enable rapid access to information for strategic decisions
 - Reduce the cost of Defense business operations
 - Improve financial stewardship to the American people
- AT&L Strategic Goals Implementation Plan V1.2 (June 2007 Update)
 - Goal 6, Outcome 3: A net-centric data environment with acquisition enterprise and life cycle management data/facts for decision making, through business transformation.
 - Successes include: "We have, within the principles of a Service Oriented Architecture (SOA), employed the principles such as enter once—use many by both identifying authoritative data sources and converting competing applications to services, which are published for use across the entire Department."



To Be UID Environment

Acquisition, Technology and Logistics





Installation and Site Relationship

Acquisition, Technology and Logistics

Installation

- Composed of one or more sites
- Managed by a single Service

Installation



Site

- Composed of one or more **Land Parcels** and/or **Facilities**
- **Over 8,000 sites worldwide (and probably much greater)**

Site A

Site B

Site ..

Asset

- Either individual **facility** (e.g., building, structure, linear structure) or **land parcel**
- Over 577K facilities on over 29M acres
- Approximately 2.38B square feet of building space

Facility(ies)



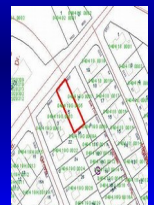
Land Parcel(s)



Facility(ies)



Land Parcel(s)





Solution – Site UID

Acquisition, Technology and Logistics

- Real Property Site Unique Identifier (RPSUID): A non-intelligent code used to permanently and uniquely identify a DoD real property site.
- Real Property Unique Identifier Registry
 - Web services interface
 - FOC for Sites: June 2007
 - Over 8000 sites associated to almost 200 installations
- Data Collection:
 - \$1.6M contract to digitize Real Estate Summary maps at the Service repositories
 - Site identification and validation completed through Service inventory systems



Data Elements Associated to Site UID

Acquisition, Technology and Logistics



- Installation Data Elements

- Installation Code
- Installation Name
- Installation Virtual Indicator
- Installation Close Date
- Installation Reporting Component Code

- Site Data Elements

- Site Code
- Site Name
- Site Creation Date
- Site Primary Activity Code
- Site Primary Indicator
- Site Operational Status Code
- Site Release Date
- Site Close Date
- Site Reporting Component Code
- Real Property Site Unique Identifier
- Congressional District Code
- Metropolitan Statistical Area Code
- EPA Region Code
- GSA Region Code



Data Elements Associated to Site UID

Acquisition, Technology and Logistics

- **Address Data Elements**

- Address Street Direction Code
- Address Street Name
- Address Street Number
- Address Street Type Code
- City Code
- County Code
- State or Country Primary Subdivision Code
- Site Rural Urban Code
- Country Code
- Postal Code





Solution: RPUID

Acquisition, Technology and Logistics

- Real Property Unique Identifier (RPUID): A non-intelligent code used to permanently and uniquely identify a DoD real property asset.
- Real Property Unique Identifier
 - Web services interface
 - Asset UIDs FOC scheduled for December 2007
 - Over 600,000 assets to associate to sites
- Data Collection
 - \$1.8M contract to digitize deeds, permits, and licenses at Navy repositories and Air Force installations
 - DoDI 4165.14, *Real Property Inventory and Forecasting*
 - Real Property Information Model

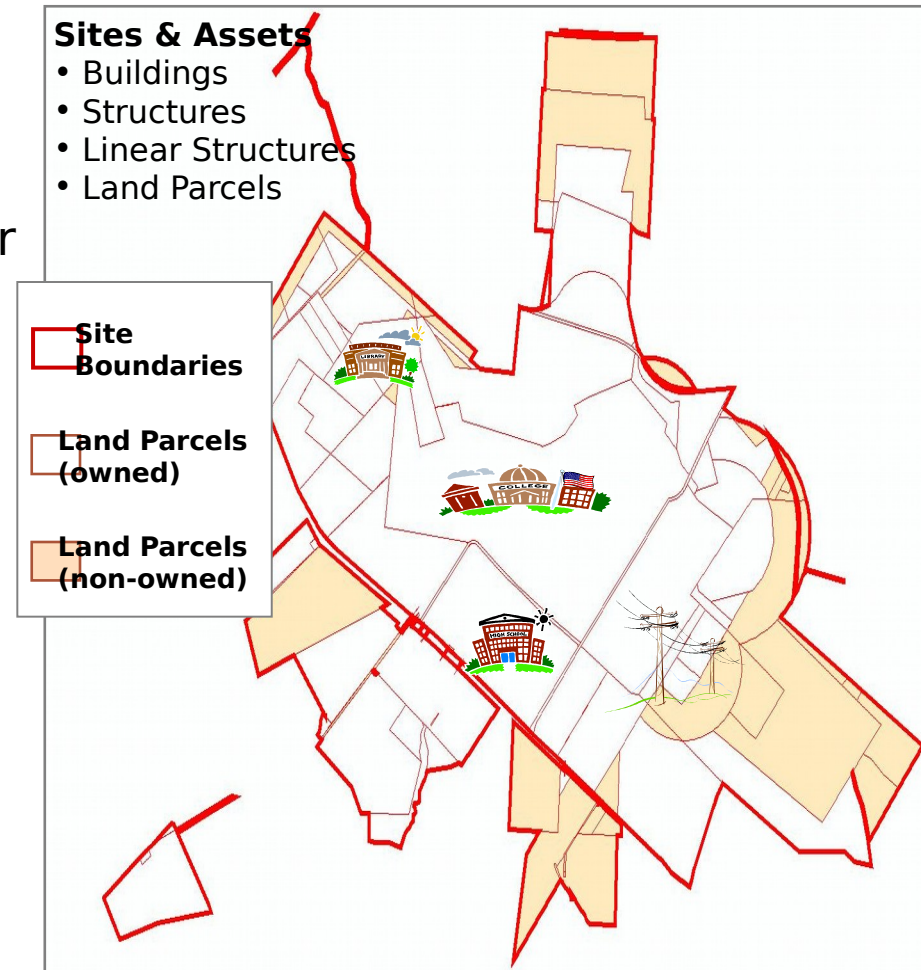


Data Elements associated to RPUID

Acquisition, Technology and Logistics

- **Asset Data Elements**

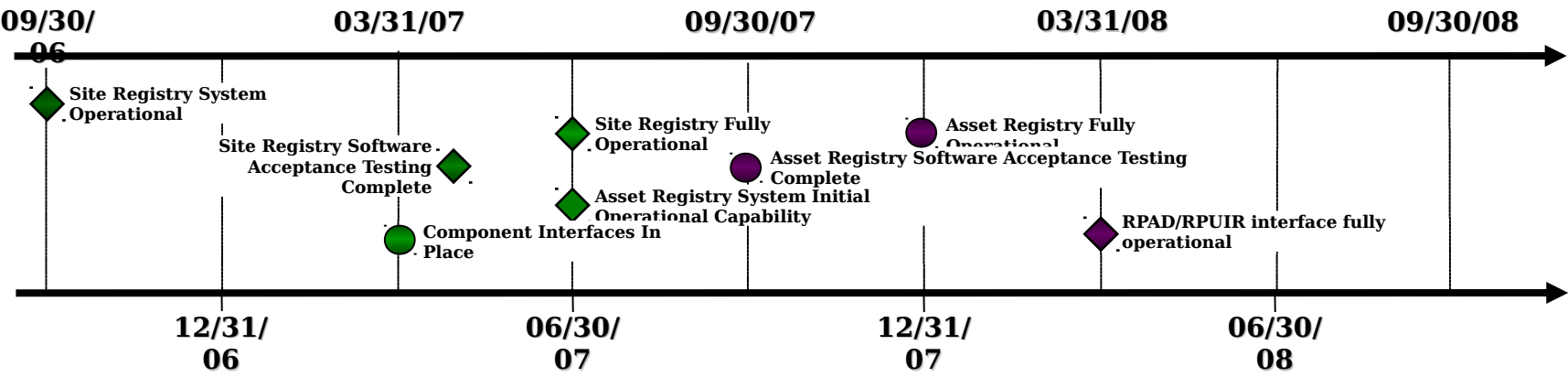
- RPA Name
- Facility Number
- Land Acquisition Tract Identifier
- RPA Type Code
- Acquisition Date
- RPA Interest Type Code
- RPA Predominant Design Use FAC Code
- RPA Operational Status Code
- Disposal Completion Date
- Real Property Unique Identifier
- Congressional District Code
- And Address related Data Elements





Timeline

Acquisition, Technology and Logistics





Why Condition on Non-RP&ILM Systems

Acquisition, Technology and Logistics

- DoD systems using one source for identifying DoD location

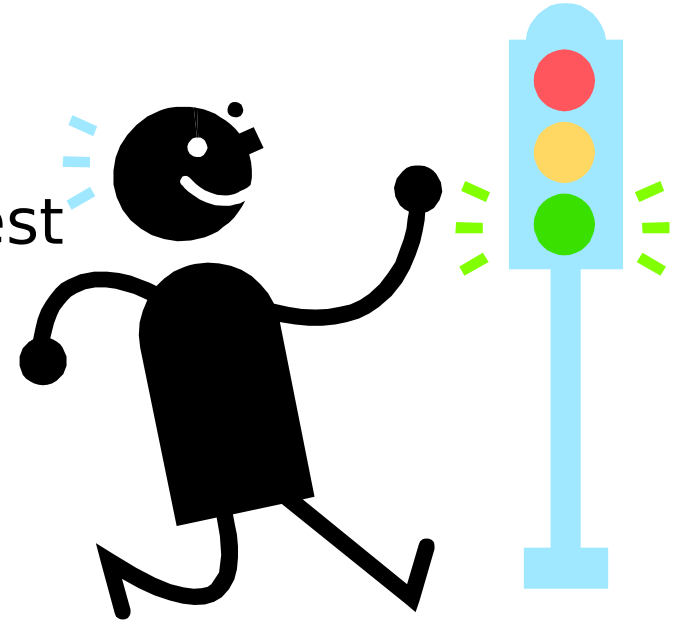
- Authoritative: Legal Interest

- Efficient: Web Services

- Accurate: Real-time update

Minimizes human error

Independent Verification and Validation





Backup



Enter Once at the Authoritative Source

Acquisition, Technology and Logistics

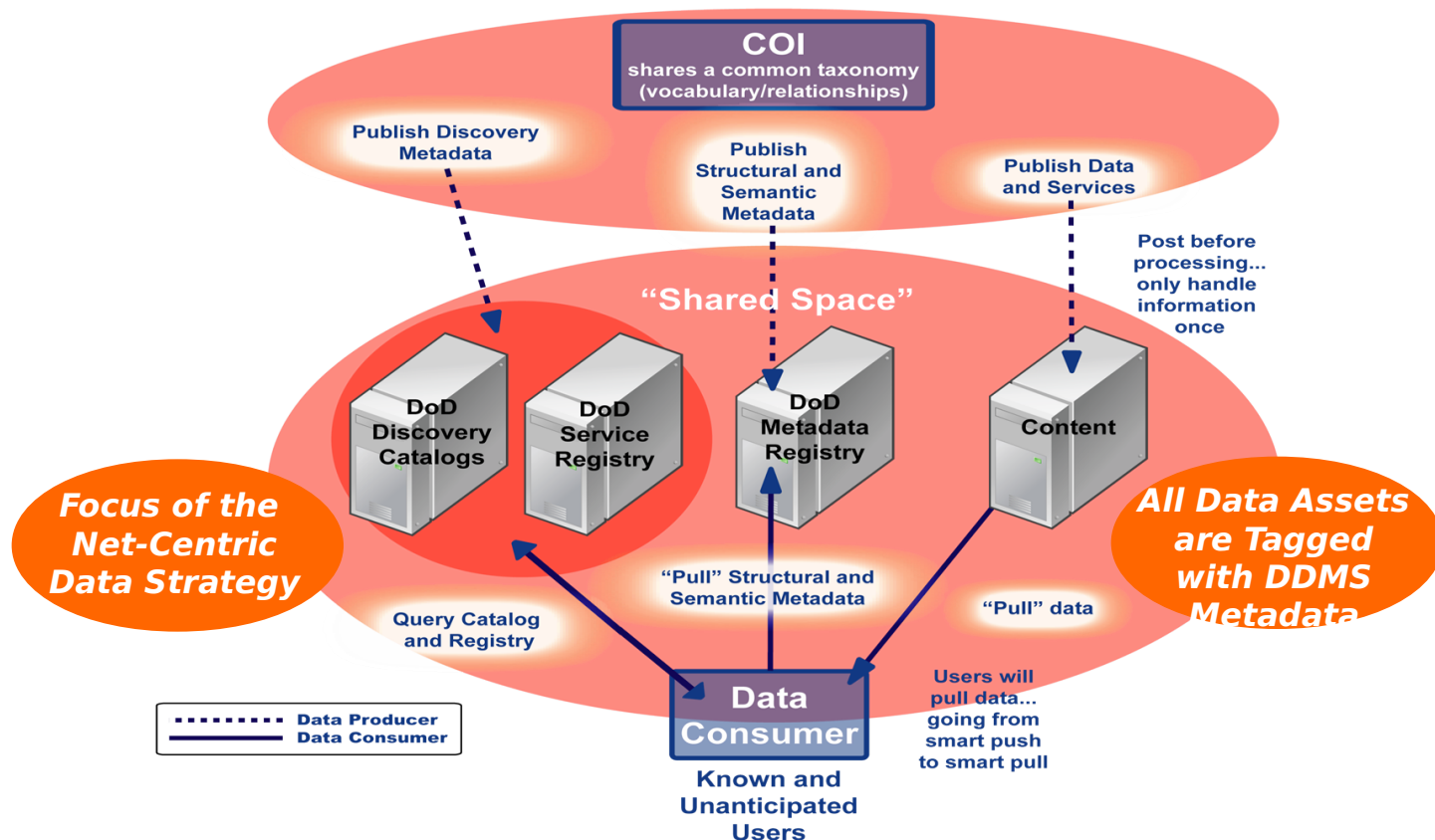
- Duplicates minimized:
 - 18 GEOLOCs related to Norfolk installations
 - 6 are categorized as “city” with same coordinates
 - 3 sets of duplicate installation types, names and coordinates
 - One location has 2 installation types: storage and port
- Assignment based on Accountability
 - Organization codes liberated from constraints of location
 - Sites and assets assigned RPUID based on Military Service accountability for property rather than building use
 - Installations able to adjust to changing environment without impact to data quality
- Data Completeness and Standardization
 - Address construct minimizes potential for same asset associated to multiple sites
 - Ability to locate assets enhanced
 - RPUIDs are never reused
 - Service Oriented Architecture ensures data is current
 - Installation, site, and address construct business rules and IV&V



Implement the Net-Centric Data Strategy

Acquisition, Technology and Logistics

Execution documented in the PDM III Core Enterprise Services Findings and Recommendations Report* and Implementing the Net-Centric Data Strategy Progress and Compliance Report**



* DepSecDef approved report findings and recommendations on 05 October 2006.

** DepSecDef approved report findings and recommendations on 14 September 2006.

*** COI/NII Graphic

Installation Geospatial Information and Services (IGI&S) databases to include Real Property Unique Identifiers for sites and assets.

Registry search links results with mapping portal.

Authoritative geospatial location for RP sites and assets are the IGI&S mapping databases.

Site View Filtered by Site UID - 663

Definition: The table below is an array of "site" data. When a site is registered it receives a unique site identification (REAL_PROPERTY_ID).

View: [Metadata](#) [History](#) of data changed in the last 1007 days

Download: [Text](#) [XML file](#) [XML file with a schema](#)

If you experience a problem while downloading any file, please contact AMC-A611.rpui@scott.af.mil.

Site Reporting Component Code	Real Property Site Unique Identifier	Site Name	Site Code	Address Street Direction Code	Address Street Name
A	663	PORT HUENEME	SC750		

1 records displayed.

Do a different search by choosing a column to search on and typing some text to search for.

Site Reporting Component Code

RPUID and RPSUID - link records to map of site or asset

DUSD (I&E) - DISDI Portal - Microsoft Internet Explorer provided by DUSD/AT&L

Address: <https://rsgis.crrrel.usace.army.mil/disdicm/viewer.intro#n>

Office of the Deputy Under Secretary of Defense
INSTALLATIONS AND ENVIRONMENT
DISDI Portal

Home Viewer Zoom To Metadata Results Services Help Feedback

Installation Locations

- ☒ Installation and Range Locations
- ☐ Base Structure Report
- ☐ Formerly Used Defense Sites

Installation Layers

- ☒ Installation Boundaries
- ☐ Noise Zones
- ☐ Accident Potential Zones
- ☐ Floodplains (100 Year)
- ☐ Wetlands
- ☐ Runways

Range and Training Layers

- ☐ Range Complex Boundaries
- ☐ Special Use Airspace - Low Altitude
- ☐ Special Use Airspace - High Altitude
- ☐ Military Training Routes

Imagery

- ☐ Environmental Layers

Reference Layers

- ☒ US State Boundaries
- ☒ US County Boundaries
- ☐ Federal Lands and Indian Reservations
- ☐ American Indian Areas, Alaska Native Areas, HI Homelands: 2000
- ☐ Alaska Native Regional Corporations

CONUS Map

Construction Battalion Center, Port Huene

PORT HUENEME HARBOR

Pacific Ocean

Scale: 1:45,741

Lat: 34.14 Lon: -119.21

Zoom to Major Installation, Site or Range:

- Choose Installation -

Use "Zoom To" Tab for complete list of installations & ranges

Reference Map

Legend

- Air Force
- Army
- Marine Corps
- Navy
- Washington Headquarters Services
- Air Force
- Army
- Marine Corps
- Navy
- Washington Headquarters Services
- Lake/River/Bay/Harbour
- Canal/Water Channel
- Stream



Net-Centric Warfighter Objectives

Acquisition, Technology and Logistics

I&E Net-Centric Products and Processes Support Integrated Situational Awareness of People, Places and Things

Before Net-Centricity

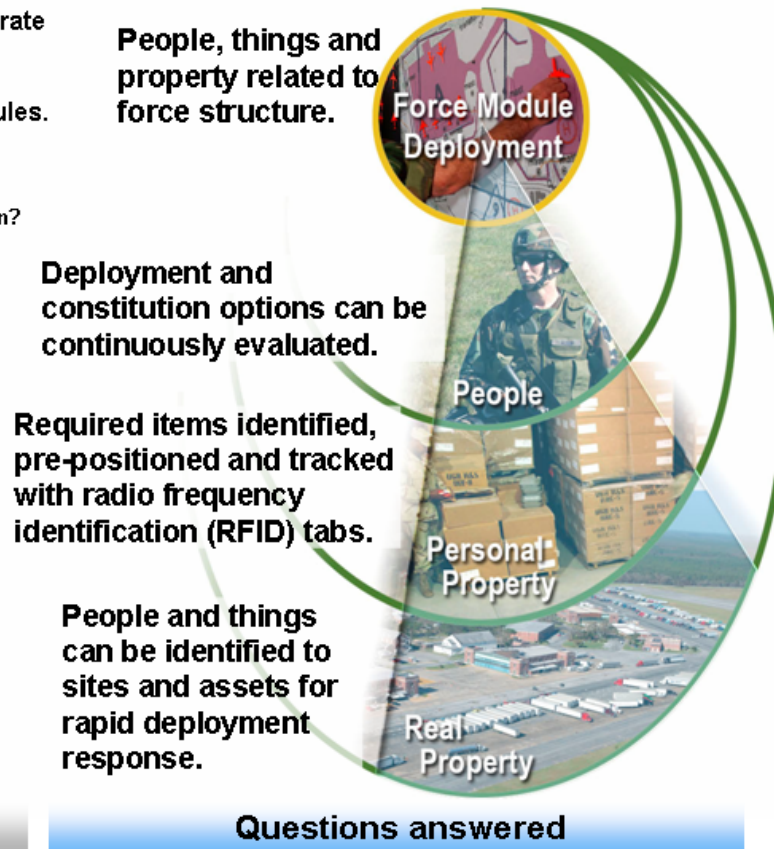
No integrated planning view



Questions

With Net-Centricity

Integrated planning view





Initiative Drivers

Acquisition, Technology and Logistics

- **Initiatives**

- **President's Management Agenda (PMA):** obtaining a clean (unqualified) financial audit opinion is basic prescription for well-managed organization
- **Executive Order 13327:** Promotes efficient and economical use of Federal government's real property assets
 - Establish the Senior Real Property Officer at all major landholding agencies
 - Direct the Senior Real Property Officers to develop and implement agency asset management plans
 - Create the interagency Federal Real Property Council
 - Authorize the development of a single and descriptive database of federal real properties
- **Joint Financial Management Improvement Program (JFMIP):** Agreed with PMA requirement for clean financial audit but added:
 - Being able to routinely provide timely, accurate, and useful financial and performance information
 - Having no material internal control weaknesses or material noncompliance with laws and regulations
 - Meeting requirements for Federal Financial Management Improvement Act of 1996
- **DoD Net-Centric Data Strategy**
 - Established DoD Metadata Registry
 - Required establishment of Communities of Interest



Legislative Drivers

Acquisition, Technology and Logistics

- **Chief Financial Officers Act of 1990**
- **FY05 National Defense Authorization Act**
 - Establishment of Defense Business Systems Management Committee
 - Establishment of PSA-led Investment Review Boards
 - Completion of Enterprise Architecture (EA)
 - Development of Transition Plan for implementing EA
 - Act reflects Congressional frustration over “lack of progress”
 - Application of Anti-Deficiency Act to IT investment spending
 - Program oversight migrated to USD (AT&L) from Comptroller



Real Property Enterprise Systems

Acquisition, Technology and Logistics

- **Real Property Unique Identifier Registry**
 - Unifying disparate real property systems and DoD information needs through the use of a strong linking mechanism
 - RPUID is the key element in the real property inventory that distinctly and uniquely identifies a parcel of land, building, or other real property improvements in which the Department has a legal interest
 - RPUID allows related data from across the spectrum DoD business areas to be linked to specific asset records
- **Real Property Assets Database**
 - Central repository of DoD RPI data
 - Net-centric data warehouse with multi-tiered SOA
 - Uses Military Departments' and WHS' authoritative RPI databases as data sources and is used to populate a variety of real property resourcing predictive data models
 - Make annual reports on agency real property inventory data to OMB and GSA